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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,917	11/16/2001	Joel Brian Derrico	9512-002-27	7900

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EXAMINER	
RAY, GOPAL C	
ART UNIT	**PAPER NUMBER**
2111	5

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/987,917	Applicant(s) DERRICO ET AL.	
	Examiner Gopal C. Ray	Art Unit 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18,20-25 and 30-39* is/are rejected.

7)☒ Claim(s) *19 and 26-29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 November 2001* is/are: a)☐ accepted or b)☒ objected to by the ~~Examiner~~ Draftsperson.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's election with traverse of Group I, claims1-33 and 37-39 by the response filed on 4/2/04 is acknowledged. The traversal is on the ground that the examination of all currently pending claims would not pose an undue burden on the examiner. The argument is persuasive and the restriction of Groups I and II are withdrawn. Claims 1-39 are presented for examination.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The examiner believes that the title of the invention is broad. A descriptive title indicative of the invention will help in proper indexing, classifying, searching, etc. See MPEP 606.01. However, the title of the invention should be limited to 500 characters.

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it exceeds 150 words limit. Applicant should reduce the abstract of the invention to 150 words. Furthermore, the words “means” and “said” should not be used in the amended abstract.

4. The drawings filed on 11/16/01 are objected to by the USPTO draftsperson. See PTO-948 for objections to the drawings. The drawings are acceptable for examination purposes only. Formal drawings will be required when the application is allowed. Direct any inquiries concerning drawing review by the USPTO draftsperson to the Drawing Review Branch at (703) 305-8404.

5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. Claim 21 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner notes the following ambiguities. However, all claims should be revised carefully to eliminate all grammatical errors and antecedent basis problems.

As per claim 21, the claim is vague and indefinite and has not been treated further on merits. The phrase "may be" in line 2 of the claim does not particularly point out and distinctly claim that the computer network appliance actually uses different software configurations to free additional hardware. Furthermore, it is unclear as to what software configuration replaces what additional hardware.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1, 2, 4-12, 17, 18, 20, 30 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,591,324 issued to Chen et al.

As per claim 1, the reference of Chen et al. teaches "a computer network appliance, comprising:a hot-swappable CPU module, a hot-swappable power module, a hot-swappable ethernet switch module" in Fig. 2 and col. 3, lines 25-44 and "a backplane board having a plurality of hot swap mating connectors" in Fig. 2, element 102 and col. 3, lines 45-55.

As per claims 2, 4 and 5, the reference of Chen et al. teaches the added features of the claims in col. 2, lines 61-65.

As per claim 6, the reference of Chen et al. teaches "wherein the modules and the chassis are free of on/off switches in col. 2, lines 23-25.

As per claims 7-11, the claims recite detailed description of module connectivity. However, the reference of Chen et al. inherently teaches the features in col. 2, line 61 – col. 3, line 2.

As per claim 12, the reference of Chen et al. teaches "wherein the CPU module operates as a stand alone computer" in Fig. 2.

As per claim 17, the reference of Chen et al. teaches "... includes an Ethernet connection providing communication to all modules to the backplane board" in col. 4, lines 31-32.

As per claim 18, the reference of Chen et al. teaches "... a standard ethernet connector allowing heterogeneous CPU modules mounted on a same chassis to communicate with each other" in col. 4, lines 49-56.

As per claim 20, the reference of Chen et al. teaches the added limitation of the claim in col. 4, lines 31-34.

As per claims 30 and 32, the claims recite methods which parallel apparatus claim 1. In teaching the construction and use of the device, US Patent 6,591,324 issued to Chen et al. teaches corresponding methods.

9. Claims 34-36 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,421,777 issued to Pierre-Louis et al.

As per claim 34, the reference of Pierre-Louis et al. teaches "locating an OS in an NAS to boot the CPU module" in col. 5, lines 17-26; "remotely booting the CPU module using the located OS in col. 6, lines 1-14; wherein the computer network appliance is free of local HDD in remotely booting the CPU module" in Fig. 3, element 332 and col. 4, lines 57-61.

As per claim 35, the reference of Pierre-Louis et al. teaches "wherein the remote booting of the CPU modules allows the CPU module to run different types of operating system" in col. 6, lines 1-20.

As per claim 36, the reference of Pierre-Louis et al. teaches the added limitation in col. 1, lines 42-60.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 37-39 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,161,097 issued to Ikeda.

As per claim 37, the reference of Ikeda teaches "converting an input voltage to desired operational voltages of the computer network appliance" in Fig. 1, element 2 and abstract, lines 1-5 and "accepting DC power directly from a battery backup source free of power inverters" in Fig. 1, element 1.

As per claim 38, the reference of Ikeda teaches "wherein the MTBF of the computer network appliance increases due to the use of the DC-DC converters in the power module" in col. 1, lines 19-23.

As per claim 39, the reference of Ikeda teaches "wherein the computer network appliance uses less power and generates less heat due to the use of the DC-DC converters in the power module" in col. 3, lines 16-21.

12. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over by US Patent 6,591,324 issued to Chen et al. in view of by US Patent 6,452,797 issued to Konstad.

As per claim 3, the reference of Konstad teaches the added limitation of the claim "providing air flow from the front to the rear of the chassis" in col. 1, lines 26-29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the above features in the system of Chen et al. because that would allow the system of Chen et al. to draw cooler air from outside the chassis. The reference of Konstad teaches the motivation in col. 1, lines 15-24.

14. Claims 13-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over by US Patent 6,591,324 issued to Chen et al. in view of by US Patent 6,421,777 issued to Pierre-Louis et al.

As per claims 13-16, the added limitation of the claims are rejected for the same reasons as discussed in the rejection of claims 34-36 respectively. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the above features in the system of Chen et al. because the remote booting would allow to upgrade or update various operating system and other maintenance that is required

to be performed.. The reference of to Pierre-Louis et al teaches that in col. 1, lines 32-63.

15. Claims 22-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over by US Patent 6,591,324 issued to Chen et al. in view of by US Patent 5,161,097 issued to Ikeda.

As per claims 22-25, the added limitations of the claims are rejected for the same reasons as discussed in the rejection of claims 37-39. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the above features in the system of Chen et al. because it is a common practice in the art and within the skill of an ordinary person to provide an electrical power unit having a battery and DC-DC converter which is capable of fully using the energy of a battery to extend the continuous duty time of an associated battery-powered electronic appliance. The reference of Ikeda teaches that in col. 2, lines 19-29.

16. Claims 31 and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over by US Patent 6,591,324 issued to Chen et al. in view of by US Patent 5,555,510 issued to Verseput et al.

As per claim 31, the reference of Verseput et al. teaches the added limitation of the claim "wherein connecting the ground pins first and the signal pins last reduce brown outs in the computer network appliance" in col. 3, lines 63-64. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the above features in the system of Chen et al. because that would protect the

circuitry in the system of Chen et al. The reference of Verseput et al teaches the motivation in col. 3, lines 37-39.

As per claim 33, the claim recites the removal of a module from the chassis and is rejected for similar reasons as discussed in the rejection of claim 31. See also col. 2, lines 50-62 of the reference of Verseput et al.

17. Claims 19 and 26-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The claims are allowable over the prior art on record because they recite additional features which the prior art on record does not teach or fairly suggest. If applicants are aware of any better prior art than those are cited, they are required to bring the prior at to the attention of the examiner.

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. Furthermore, applicant is reminded of the duty to disclose as set forth in 37 CFR § 1.56.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (703) 305-9647. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The new fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**mark.rinehart@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2100 receptionist whose telephone number is (703) 305-3900.

Gopal C. Ray

GOPAL C. RAY
PRIMARY EXAMINER
GROUP 2800